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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,845	04/11/2001	Vladimir Matena	SUNMP003	2223

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EXAMINER
YIGDALL, MICHAEL J

ART UNIT	PAPER NUMBER
2192	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	09/833,845	MATENA ET AL.
	Examiner	Art Unit	
	Michael J. Yigdall	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-8 and 10-13* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-8 and 10-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This Office action is responsive to Applicant's submission filed on December 28, 2006.

Claims 1, 4-8 and 10-13 are pending.

Response to Arguments

2.   Applicant's arguments have been fully considered but they are not persuasive.

Applicant states that the Ma reference "does not explicitly suggest or teach generating an

upgraded control module defining upgraded application-specific policies relative to the control

module or maintaining a recoverable state of the upgraded control module at a state server"

(remarks, page 6).

It is noted that Ma does not expressly disclose these features. Nonetheless, as set forth in

the Office action, Ma in view of Ferguson teaches or suggests generating an upgraded control

module defining upgraded application-specific policies relative to the control module. Similarly,

Ma in view of Ferguson in view of Arnaiz teaches or suggests maintaining a recoverable state of

the upgraded control module at a state server.

One cannot show nonobviousness by attacking references individually where the

rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ

871 (CCPA 1981), and *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant contends that Arnaiz "is not analogous art as Arnaiz deals with automatic

upgrade of software components of an application on a client" (remarks, page 7).

However, the examiner respectfully submits that the Arnaiz reference is analogous art.

As Applicant notes, Arnaiz is directed to upgrading software components for an application.

Likewise, the claimed invention is directed to performing upgrades for an application. These are

the same fields of endeavor. Furthermore, Applicant is concerned with providing a failsafe

upgrade (remarks, page 8). Arnaiz is reasonably pertinent to this problem, because as cited in

the Office action, Arnaiz provides a means to "track the progress of upgrades and roll back

changes when an error occurs, and ... restart the upgrade from the last save point" (column 3,

lines 55-59). In other words, Arnaiz is also concerned with providing a failsafe upgrade.

Applicant characterizes the system of Arnaiz such that it "is not the same as the claimed

invention where the system continues to provide services to clients while a software upgrade is

being performed" (remarks, page 8). Similarly, Applicant states that in the claimed invention,

"these upgrades are performed in place with no disruption in service" (remarks, page 8).

Again, however, one cannot show nonobviousness by attacking references individually

where the rejections are based on combinations of references. The Ma reference, for example,

discloses that the "distributed client-server application is modified while running [and] not

stopped so that updating of objects is transparent" (abstract). In other words, Ma in view of

Ferguson teaches or suggests "the application providing online execution services when

upgrading the original control module and original service module" as recited in the claims.

Arnaiz is relied upon for its suggestion to supplement Ma in view of Ferguson such that "a

recoverable state of the upgraded control module is maintained in a state server."

Furthermore, it is noted that the claims do not positively recite that the "upgrades are

performed in place with no disruption in service." Although the claims are interpreted in light of

the specification, limitations from the specification are not read into the claims. See *In re Van*

Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 1, 4-8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S. Patent No. 5,920,725 to Ma el al. (art of record, "Ma") in view of U.S. Patent No. 6,976,079

to Ferguson et al. (art of record, "Ferguson") in view of U.S. Patent No. 7,080,371 to Arnaiz et

al. (art of record, "Arnaiz").

With respect to claim 1 (previously presented), Ma discloses a method for performing an

online upgrade to a JAVA application (see, for example, the abstract, which shows a method for

performing an online upgrade to an application, and column 13, lines 18-39, which shows that

the application is a JAVA application), the method comprising:

(a) executing an application on a server without remote client execution, the execution

being in a middle-tier between a client browser and databases (see, for example, FIG. 5, which

shows executing a server application 86 in a middle-tier server 90 between a remote client 88

and an application database 64, and column 7, lines 54-56, which shows a remote client that is

idle or without remote client execution), the application having an original service module (see,

for example, objects 82 in FIG. 5) and an original control module (see, for example, object

adaptor 80 and workflow adaptor 84 in FIG. 5), wherein the original control module includes

application-specific policies for the application defining application-specific strategies and

policies for the application (see, for example, application-specific rules 81 in FIG. 5, and column

8, lines 37-39 and 58-62), and the original service module includes actual code for the

application (see, for example, column 13, lines 49-55).

Ma further discloses defining upgraded application-specific policies relative to the

original control module (see, for example, column 8, line 55), but does not expressly disclose:

(b) generating an upgraded control module defining upgraded application-specific

policies relative to the original control module.

However, Ferguson discloses an analogous method for performing an online upgrade to a

JAVA application (see, for example, the abstract, and column 2, lines 25-37) that comprises

executing an application on a middle-tier server (see, for example, FIG. 1) without remote client

execution (see, for example, column 1, lines 42-56). In addition to upgrading the application

software, or the module that includes the code for the application, Ferguson also discloses

upgrading the server software, or the module that controls the application on the server (see, for

example, column 6, lines 8-22), so as to provide new or more reliable functionality in either

module (see, for example, column 1, lines 32-41). The application software and server software

are comparable to the service module and control module of Ma, respectively.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to generate an upgraded control module in Ma, so as to provide new or more

reliable functionality in that module, such as taught by Ferguson.

Ma in view of Ferguson further discloses the upgraded control module being defined by

upgraded class files (see, for example, new object class 68 in FIG. 3, and column 6, lines 58-60)

loaded from a system repository that is part of the databases (see, for example, meta object

database repository 62 in FIG. 3, and column 6, lines 39-40 and 52-55); and

(c) creating an upgraded service module using the upgraded control module (see, for example, column 8, lines 10-13), the upgraded service module is generated using upgraded class files for the upgraded service module loaded from the system repository (see, for example, new object class 68 and meta object database repository 62 in FIG. 3, and column 6, lines 31-34, 52-55 and 58-60), the application providing online execution services when upgrading the original control module and original service module (see, for example, column 4, lines 59-63, which shows that the application provides online execution services when upgrading the modules), wherein the original control module and the upgraded control module respectively supervise a life cycle of the original control module and upgraded control module (see, for example, FIG. 8, which shows that object adaptor 80 supervises a life cycle of the original and upgraded modules), such that the application-specific strategies and policies for the application are maintained during execution (see, for example, column 8, line 66 to column 9, line 5).

Ma in view of Ferguson further discloses a state server (see, for example, meta server 70 in FIG. 5), but does not expressly disclose that a recoverable state of the upgraded control module is maintained in a state server.

However, Arnaiz discloses an analogous method for performing an upgrade to an application (see, for example, the abstract). Arnaiz further discloses maintaining a recoverable state of the upgrade (see, for example, column 19, lines 34-39), so as to roll back and restart the upgrade if there are any errors (see, for example, column 3, lines 55-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to supplement Ma in view of Ferguson such that a recoverable state of the upgraded control module is maintained in a state server, so as to roll back and restart the upgrade if there are any errors, such as taught by Arnaiz.

With respect to claim 4 (previously presented), the rejection of claim 1 is incorporated, and Ma in view of Ferguson in view of Arnaiz further discloses the operation of disabling requests to the original service module (see, for example, column 7, lines 22-25 and 40-45, which shows disabling requests to the original objects by marking them as invalid and deleting them).

With respect to claim 5 (original), the rejection of claim 4 is incorporated, and Ma in view of Ferguson in view of Arnaiz further discloses the operation of enabling requests to the upgraded service module (see, for example, column 7, lines 22-25 and 40-45, which shows enabling requests to the upgraded objects by loading and instantiating them).

With respect to claim 6 (original), the rejection of claim 1 is incorporated, and Ma in view of Ferguson in view of Arnaiz further discloses the operation of upgrading a child application using the upgraded control module (see, for example, column 7, lines 46-51).

With respect to claim 7 (previously presented), the rejection of claim 6 is incorporated, and Ma in view of Ferguson in view of Arnaiz further discloses the operation of passing the application-specific policies to a control module of the child application (see, for example, column 8, lines 20-25).

With respect to claim 8 (previously presented), Ma discloses a JAVA platform capable of performing online software upgrades (see, for example, the abstract, which shows a platform capable of performing online software upgrades, and column 13, lines 18-39, which shows that the platform is a JAVA platform), the JAVA platform comprising:

(a) an application being executed on a server without remote client execution, the

execution being in a middle-tier between a client browser and databases (see, for example, FIG.

5, which shows a server application 86 in a middle-tier server 90 between a remote client 88 and

an application database 64, and column 7, lines 54-56, which shows a remote client that is idle or

without remote client execution), the application having an original service module (see, for

example, objects 82 in FIG. 5) and an original control module (see, for example, object adaptor

80 and workflow adaptor 84 in FIG. 5), wherein the original control module includes

application-specific policies for the application defining application-specific strategies and

policies for the application (see, for example, application-specific rules 81 in FIG. 5, and column

8, lines 37-39 and 58-62), the original service module includes actual code for the application

(see, for example, column 13, lines 49-55); and

(b) a system repository that is part of the databases having upgraded class files for the

original control module and upgraded class files for the original service module (see, for

example, meta object database repository 62 and new object class 68 in FIG. 3, and column 6,

lines 39-40 and 52-55),

Ma further discloses defining upgraded application-specific policies relative to the

original control module (see, for example, column 8, line 55), but does not expressly disclose:

(c) wherein the original control module is upgraded by generating an upgraded control

module defining upgraded application-specific policies relative to the original control module.

However, Ferguson discloses an analogous JAVA platform capable of performing online

software upgrades (see, for example, the abstract, and column 2, lines 25-37) that comprises an

application on a middle-tier server (see, for example, FIG. 1) without remote client execution

(see, for example, column 1, lines 42-56). In addition to upgrading the application software, or

the module that includes the code for the application, Ferguson also discloses upgrading the

server software, or the module that controls the application on the server (see, for example,

column 6, lines 8-22), so as to provide new or more reliable functionality in either module (see,

for example, column 1, lines 32-41). The application software and server software are

comparable to the service module and control module of Ma, respectively.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to generate an upgraded control module in Ma, so as to provide new or more

reliable functionality in that module, such as taught by Ferguson.

Ma in view of Ferguson further discloses the upgraded control module being defined by

upgraded class files (see, for example, new object class 68 in FIG. 3, and column 6, lines 58-60)

loaded from the system repository that is part of the databases (see, for example, meta object

database repository 62 in FIG. 3, and column 6, lines 39-40 and 52-55), and wherein the original

service module is upgraded by creating an upgraded service module using the upgraded control

module (see, for example, column 8, lines 10-13), the upgraded service module is generated

using upgraded class files for the upgraded service module loaded from the system repository

(see, for example, new object class 68 and meta object database repository 62 in FIG. 3, and

column 6, lines 31-34, 52-55 and 58-60), the application providing online execution services

when upgrading the original control module and original service module (see, for example,

column 4, lines 59-63, which shows that the application provides online execution services when

upgrading the modules), wherein the original control module and the upgraded control module

respectively supervise a life cycle of the original control module and upgraded control module

(see, for example, FIG. 8, which shows that object adaptor 80 supervises a life cycle of the

original and upgraded modules), such that the application-specific strategies and policies for the

application are maintained during execution (see, for example, column 8, line 66 to column 9, line 5).

Ma in view of Ferguson further discloses a state server (see, for example, meta server 70 in FIG. 5), but does not expressly disclose that a recoverable state of the upgraded control module is maintained in a state server.

However, Arnaiz discloses an analogous method for performing an upgrade to an application (see, for example, the abstract). Arnaiz further discloses maintaining a recoverable state of the upgrade (see, for example, column 19, lines 34-39), so as to roll back and restart the upgrade if there are any errors (see, for example, column 3, lines 55-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to supplement Ma in view of Ferguson such that a recoverable state of the upgraded control module is maintained in a state server, so as to roll back and restart the upgrade if there are any errors, such as taught by Arnaiz.

With respect to claim 10 (previously presented), the rejection of claim 8 is incorporated, and the limitations recited in the claim are analogous to those of claim 4 (see the rejection of claim 4 above).

With respect to claim 11 (previously presented), the rejection of claim 10 is incorporated, and the limitations recited in the claim are analogous to those of claim 5 (see the rejection of claim 5 above).

With respect to claim 12 (previously presented), the rejection of claim 8 is incorporated, and the limitations recited in the claim are analogous to those of claim 6 (see the rejection of claim 6 above).

With respect to claim 13 (previously presented), the rejection of claim 12 is incorporated, and the limitations recited in the claim are analogous to those of claim 7 (see the rejection of claim 7 above).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Yigdall whose telephone number is (571) 272-3707. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.
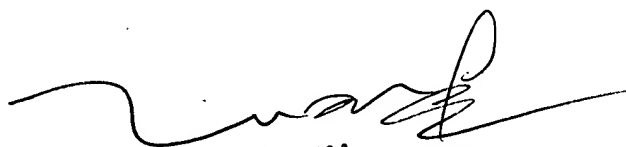
If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

<div style="text-align:right">

Michael J. Yigdall

/MY   Examiner

Art Unit 2192

</div>

mjy

TUAN DAM
SUPERVISORY PATENT EXAMINER